DOCUMENT RESUME

ED 307 305 TM 013 357

AUTHOR Batenburg, Theo A. van; Creemers, Bert P. M.
TITLE An Evaluation of Language Curricula in the Netherlands.
SPONS AGENCY Netherlands Foundation for Educational Research, The Hague.
PUB DATE Mar 89
NOTE 13p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, March 27-31, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; *Curriculum Evaluation; Curriculum Research; Elementary Education; *Elementary School Curriculum; Elementary Schools; Elementary School Students; *Foreign Countries; Grade 8; *Instructional Effectiveness; Instructional Material Evaluation; *Language Arts; Language Proficiency; Program Evaluation
IDENTIFIERS *Netherlands

ABSTRACT

Eight language curricula that are widely used in the Netherlands for children up to grade 8 were evaluated. Questions examined were: (1) whether the use of a particular curriculum results in greater achievement in specific language areas; (2) what differences and similarities exist among these curricula; (3) do differences exist in the ways in which the curricula are implemented; and (4) in what settings is each used. Focus was on determining whether and to what degree the eight language curricula affected achievement in different language areas. In all, 110 schools and 2,750 students in grade 8 participated in the evaluation. The data set is representative for the last grade of primary education in the Netherlands. The effects of the curricula were assessed by a series of tests representing the curriculum's objectives. Although there were many practical and theoretical problems in comparing the curricula, analysis of variance did not indicate any differences in effectiveness among these curricula. It was not possible to calculate differences in the implementation of these curricula. These findings do not imply that education could do without language curricula; without them, good education is not possible. Teachers should be coached to implement these curricula in the proper way. When effective variables are built into the curriculum it might become more effective, and the determination of effectiveness might be enhanced. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED307305

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

THEO A. VAN BATENBURG

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

AN EVALUATION OF LANGUAGE CURRICULA IN THE NETHERLANDS

Theo A. van Batenburg & Bert P.M. Creemers

TM013357

BEST COPY AVAILABLE

An evaluation of language curricula in the Netherlands.*

paper to be given at the AERA, San Francisco 1989

Theo A. van Batenburg & Bert P.M. Creemers
RION: institute for educational research
University of Groningen
P.O. box 1286
9701 BG Groningen
The Netherlands

Language curricula in Dutch education

Since the beginning of this century several language curricula have been brought onto the Dutch market for primary education. These curricula, which cover pupils' textbooks and subject matter and teacher guides (and additional resources) are developed for children in the ages six to twelve. The designers of language curricula are responsive to all kinds of educational reform. At the present moment primary schools can select from some fifteen different language curricula. For Dutch primary schools the choice of a new curriculum is a major event and takes place every five to ten years. Until now the choice of a language curriculum was made mainly on the basis of aspects of form. The realisation of specific educational objectives is not an important consideration choosing a curriculum(Harskamp et.-al.,1982).

It is clear that language curricula play an important role in education and that the curricula have changed under the influence of time and educational reform. More recent curricula have facilitated differentiated instruction and the subject matter is more closely linked to pupils' domains of interest. The subject matter is more varied and is integrated by using a thematic approach. Besides the basic language skills all kinds of skills are taught. In the older curricula the accent was

*) This article has been made possible thanks to a subsidy granted by SVO- Institute for Educational Research in the Netherlands(SVO-project 4030)

TM013357

more on correct spelling and the proper use of grammar. The newer curricula, developed since the sixties, contain more productive language skills like speaking and creative writing. Another important innovation is a more individualized teaching approach. The new curricula offer sorts of content matter that make ability grouping possible. More recent curricula also offer tests that make an evaluation of pupils' progress easier and they are also better structured(Slavenburg,1986). The question arises whether educational innovations, as they have taken shape in language curricula, have different effects on pupils' language skills. For this reason eight different widely-used curricula were subjected to a critical evaluation. The following questions were examined:

1. Does the use of a certain language curriculum lead to greater achievements in specific language areas than the use of another?
2. Which are the differences and similarities between language curricula?

   This question refers to the educational objectives which designers pursue in constructing their curriculum.
3. Are there any differences in the way in which the curricula are implemented?
4. What is the setting in which the curriculum is used?.

   This question refers to intervening pupil and teacher variables.

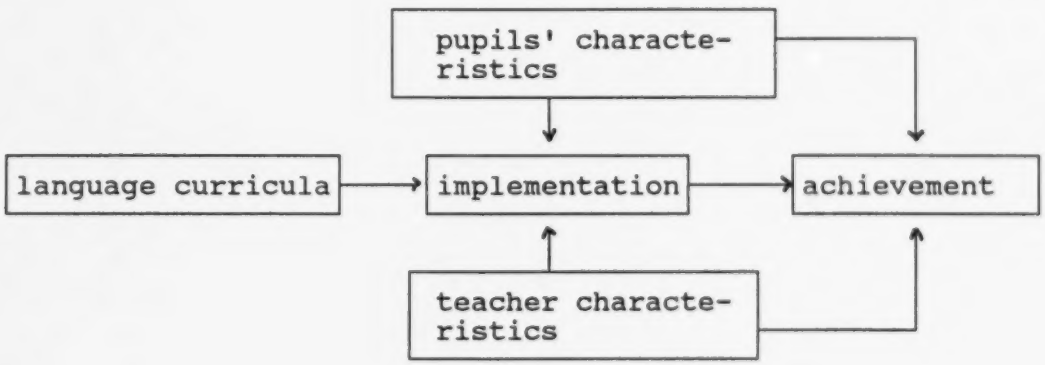
For this research we selected eight curricula, covering about 80% of the market. They do not only differ greatly with regard to the length of time they have been on the market, but also show large variations in the amount, the sequence and content of subject matter. For this reason it is not possible to create categories in which comparable language curricula are grouped together.

The present study is aimed mainly at determining whether and to what degree the eight language curricula affected achievement in different language areas(van Batenburg,1988). This

evaluation fits within the frame of reference of the so called 'effective school' research tradition. This tradition forms a contrast to previous studies from which it was inferred that achievement is mainly affected by intelligence and social background. Given the central position language curricula have in Dutch education, it seems reasonable to attribute explanatory value not only to school and organizational variables but to language curriculum variables as well.

Implementation and pupil and teacher characteristics

To assume a direct relation between language curricula and achievement is not very realistic. A curriculum has to be implemented by the teacher, who does so in her own individual way, taking into account pupils' background and intelligence. The effect of language curricula can be assessed only if the implementation process and pupil and teacher characteristics are also taken into consideration. Of course there are numerous other variables that also affect achievement, such as family, peergroup and cultural variables. However, from the viewpoint of evaluation, it is advisable to use only a limited number of covariates. It is impossible to control for "everything". This consideration has lead to the following theoretical model of variables and influences:



Language curricula can influence achievement through the process of implementation. A curriculum that is not implemented can not have an effect. Pupils' and teacher characteristics influence achievement directly and indirectly via implementation.

Design and data

This investigation can be characterised as a program evaluation. We were inspired by the betting model(Hofstee, 1980) which is useful in solving evaluation problems. In this betting model agreement about effect criteria between designers of language curricula and researchers is essential. Agreement was sought primarily to avoid immunization strategies: designers of language curricula can then be 'pinned down' even when results are unfavourable for their curriculum. The designers were also asked to predict test scores of pupils who make use of their curriculum. This was done to assess the degree to which educational objectives, as measured by the tests, were realized.

The relative effectiveness of the curricula was measured by means of analysis of variance after controlling for relevant variables. These relevant covariables were found after partial correlation analysis and the fitting of a LISREL-model. This process was carried out in order to avoid overcorrection: we were only interested in the unique part of the variance in each variable.

Before the data collection we had to take inventory of the use of the various curricula in schools. Our goal was to collect data from at least 15 schools in each curriculum. We did not achieve this number for three out of the eight language curricula because of a low degree of dissemination. In total 110 schools and 2750 grade 8 pupils cooperated in this investigation. A comparison of mean test scores with national norms showed no significant differences. This made us conclude that our data set is representative for the last grade of primary education

in Holland. In the last year of the primary school the chance is greatest that effects will have crystallised out. Pupils and teachers have used the curriculum then for six years.

Instruments

In the starting period of this investigation an analysis of the subject matter of several language curricula was carried out. This was done to obtain information about the similarities and differences between the "CITO-test" and the subject matter of the language curricula. The CITO-test(a standardized achievement test for grade 8 pupils) covers mainly basic language skills like spelling, interpretative reading and grammar. For this reason, and to facilitate on the process of reaching agreement about effect criteria with designers, we constructed additional tests for speaking skills, (creative) writing skills, listening skills and critical reading skills. We succeeded in constructing reliable tests for all these skills except for speaking. For the measurement of speaking and creative writing skills judges were used, the other tests were of the multiple choice type. All these tests together cover most of the content of the subject matter in the language curricula.

In a questionaire teachers were asked to what degree they individualise their instruction(differentiation). This was done by means of an item scale(Reezigt,1986). Teachers were also asked how much time they spend on the different language skills. By means of two attitude scales it was assessed to what degree teachers operate in a manner which is 'pupil orientated' and 'discipline orientated'(Meijnen 1980).

The social background of pupils was assessed in terms of the profession of the father in a variable with six categories from unskilled labourer up to academic professions. The assessment of intelligence was caried out by way of the non-verbal part of a general intelligence test(ISI, Boxtel, Snijders&Welten 1982).

Results

Educational objectives

When asked about the relative importance of language tests the designers put more importance on the newly constructed tests. This result leads us to the conclusion that designers pay more attention to "modern skills" than to the basic language skills. Their predictions of pupils test performance were inaccurate. Designers have little idea about the test scores of the pupils who use their curriculum. For tests that assess basic skills they tend to under-estimate and for the other skills they tend to over-estimate the test performance of their pupils. The designers place their priorities more on the modern educational objectives like creative writing, critical reading ability and listening, however without the expected results.

Implementation

The teachers' manuals for the language curricula were studied in order to find prescriptions for the way a curriculum should be used in the classroom by the teachers. Contrary to our expectations in general no prescriptions were found. On the contrary teachers were advised to implement the curriculum in their own individual way. Because of this our theoretical distinction between "factual implementation" and "prescribed implementation" is useless, since there is no degree of implementation to which these two concepts could be compared. The concept of implementation has to do with the way the curriculum is used in the classroom. Indicators for this factual implementation are: the amount of subject matter which is handled, the amount of time spent on the diverse language skills and differentiation. About 80 percent of the subject matter has been taught at the end of the schoolyear. There are no differences here between the curricula. The proportion of time spent on the different language skills did not differ much between curricula. Nor did the way in which the teachers individualise their lessons. The

last point is quite striking because older methods are constructed only for frontal classroom teaching. These teachers tend to individualise anyhow.

Teacher characteristics

The differences between the teachers who work with the eight curricula on the two attitude scales 'pupil orientation' and 'discipline orientation' proved to be non significant. The age of teachers of one curriculum was significantly lower(about 10 years with a mean age of 30) than the others.

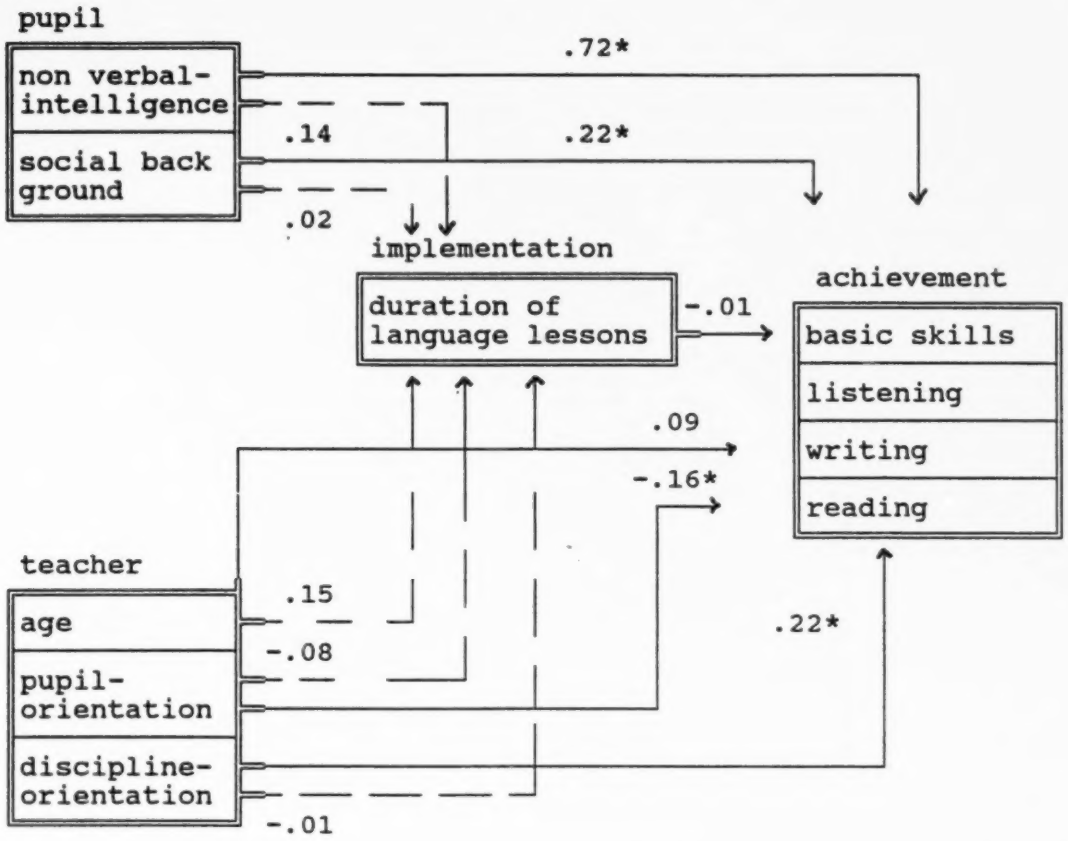
Pupil characteristics

The differences between the curricula on the variable social background were significant. One curriculum, especially designed for children with disadvantaged background, was indeed in use with children from the lower economic stratum. The differences on the non-verbal intelligence test were not significant.

Analysis of variance

Before the analysis of variance could be performed it was nessasary to know which covariates had to be included in the model. The covariates were selected for their contribution of unique variance to achievement by way of partial correlation analysis. A potential covariate had to contribute unique variance after controlling for intelligence and background of the pupils. The remaining variables after this procedure were modelled in LISREL to trace indirect relations. The following model fitted the data well:

LISREL-MODEL
COVARIATES



N=81; df=20 chi square=25.16 p=.20
goodness of fit =.94
* =significant path(T≥2)

The model shows that non-verbal intelligence is by far the best predictor of achievement. Social background and the two teacher attitude scales have a small but substantial contribution. The implementation variables showed no contribution in predicting achievement.

The relative effect of language curricula was assessed by

means of analysis of variance on the level of the class. The design had three sources of variance in achievement:

- the variance caused by non-verbal intelligence, social background, pupil orientation and discipline orientation;
- variance due to the factor curriculum(eight levels);
- residual variance(variance cleared from the two above mentioned sources of variance).

Firstly the variance of the covariates was substracted and thereafter the variance of the curricula was tested against the residual variance. This was done multi- and univariate.
The analysis of variance showed no differences in effectiveness between curricula on all language tests. The curricula are all equally effective.

Discussion

The effect of language curricula was assessed by a series of language tests representing the curricula's objectives. In this evaluation agreement was reached upon the appropriateness of these language tests as measuring devices for the effects of their curricula. According to the designers the tests cover the subject matter sufficiently, and they can also be considered as relevant instruments for assessing effects. The problem of reaching agreement about the effect criteria was solved properly, immunisation strategies were avoided. The predictions made by the designers about the test scores of their pupils could offer a standard by which the degree to which their own educational objectives were realised could be assessed. However, because of the inaccuracy of these predictions, serious doubts could be raised about their value. In the betting model the quality of the predictions is linked to the quality of the curriculum, and because these predictions are made by the designers it might be possible that the quality of the predictions are also dependent on the intelligence of the designers. The intelligence or cleverness of designers is probably not the best indicator for

the quality of the curriculum. More interesting is the result that the implementation variables did not contribute to achievement. However without implementation of a curriculum no effects can emerge. In that case one can speak of a non-event. There is often talk about a distinction between "factual" and "prescribed" or "desired" implementation. The degree of implementation or, implementation value, is the factual implementation divided by the desired implementation. We were not able to calculate this implementation value because no prescriptions were made by designers in de teachers'manual how to implement the curriculum. We recommend that designers give more attention to this problem and advise teachers more about proper use of the curriculum, so that a more effective implementation will be possible. The construction of good subject matter alone is not enough.

The assessment of factual implementation is also problematic because the use of observations on a large scale is very expensive. Interesting instruction variables like time per task could not be assessed in a valid way. The duration of language lessons and time spent on the different language skills are only meager indicators of the concept 'time per task'. Other instructional variables could only be assessed in a rather flimsy manner(for example differentiation), or not at all(feedback, reinforcement). There are indications that these variables have a greater influence on achievement(see Fraser et al,1987). For our evaluation this would imply other covariates in the analysis of variance.

The analysis of variance showed no differences in effectiveness between curricula. This finding does not imply that education could do without language curricula. Without them, good education is not possible. However the pursuit of improvement by means of innovative curricula has not proved very realistic. We have seen that the teacher has a reasonable amount of influence. Teachers should therefore be coached to implement the method in the proper way. When effective variables are built into the curriculum it might be effective. Time per task, feedback, struc-

ture and reinforcement and other effective variables could or should inspire the designers of the curricula.

Literature

Batenburg, Th. A. van. (1988). Een evaluatie van taalmethoden. Groningen, RION, Dissertation.

Boxtel, H.W., Snijders, J. Th. & Welten, V.J. (1982). ISI-handleiding voor de gehele testreeks en verantwoording van het prestatie gedeelte. Publicatievorm III. Groningen: Wolters-Noordhoff.

Fraser, B.J.et. al.(1987). Syntheses of Educational Productivity Research. International Journal of Educational Research, vol. 11, nr. 2.

Harskamp, E.et. al.(1982). Evaluatie van leermethoden in het basisonderwijs. Haren: RION.

Hofstee, W.K.B. (1980). De empirische discussie. Meppel: Boom.

Meynen, G.W.(1982). Schoolloopbanen in het lager onderwijs. Groningen: Sociologisch instituut.

Reezigt, G.J., et. al. (1986). Differentiatie op de basisschool. Groningen, RION.

Slavenburg, J.H. (1986). Onderwijsstimulering en gezinsactive ring. Den Haag: SVO. Dissertation